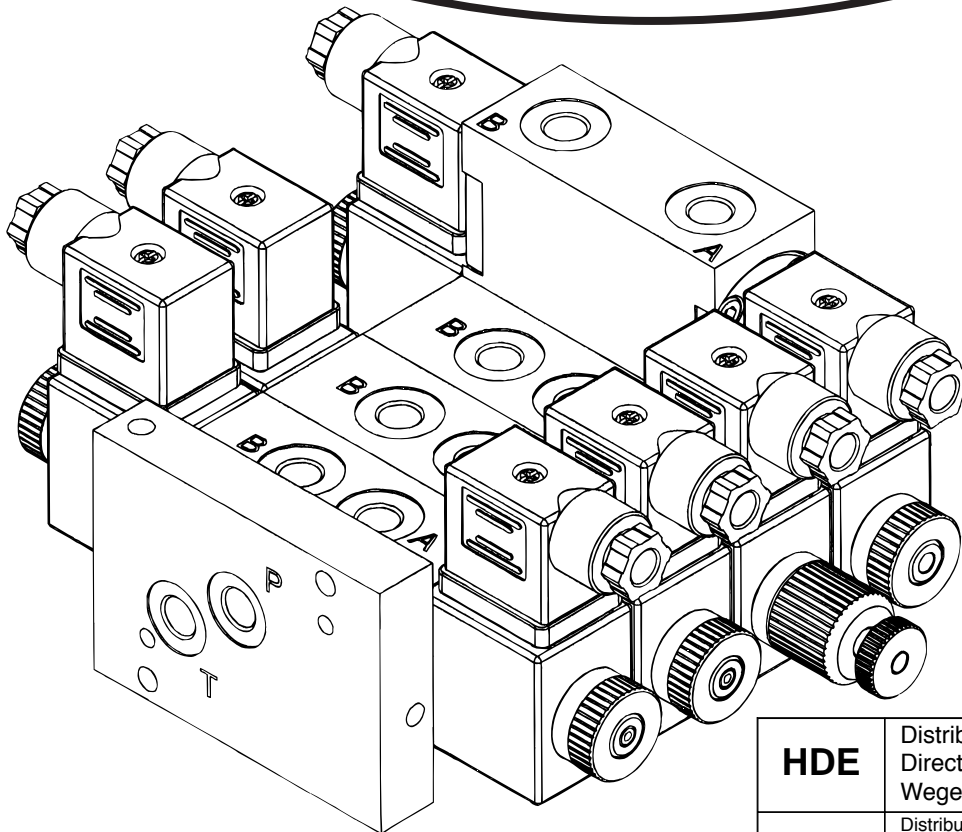
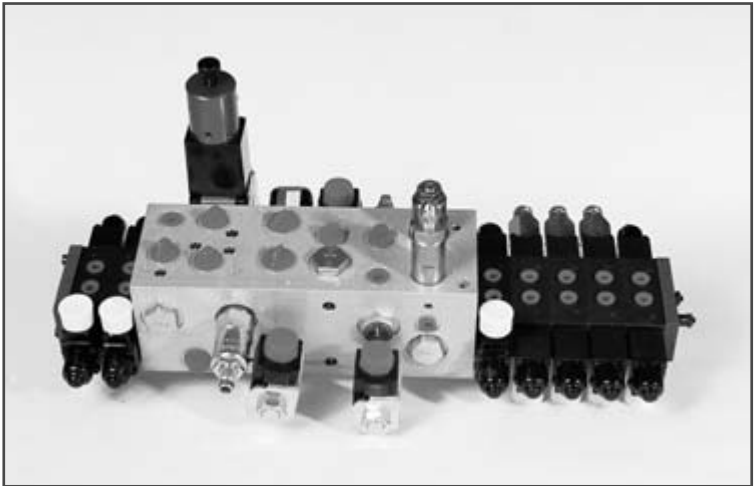
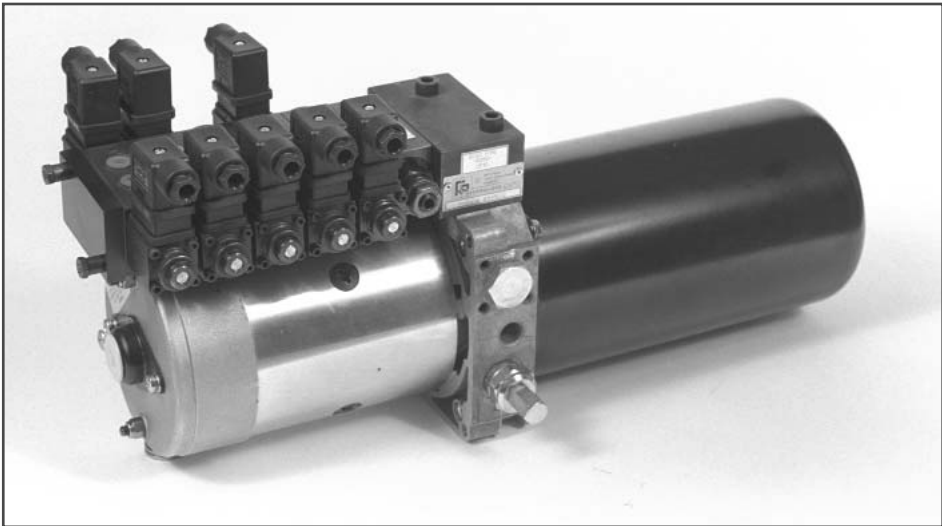
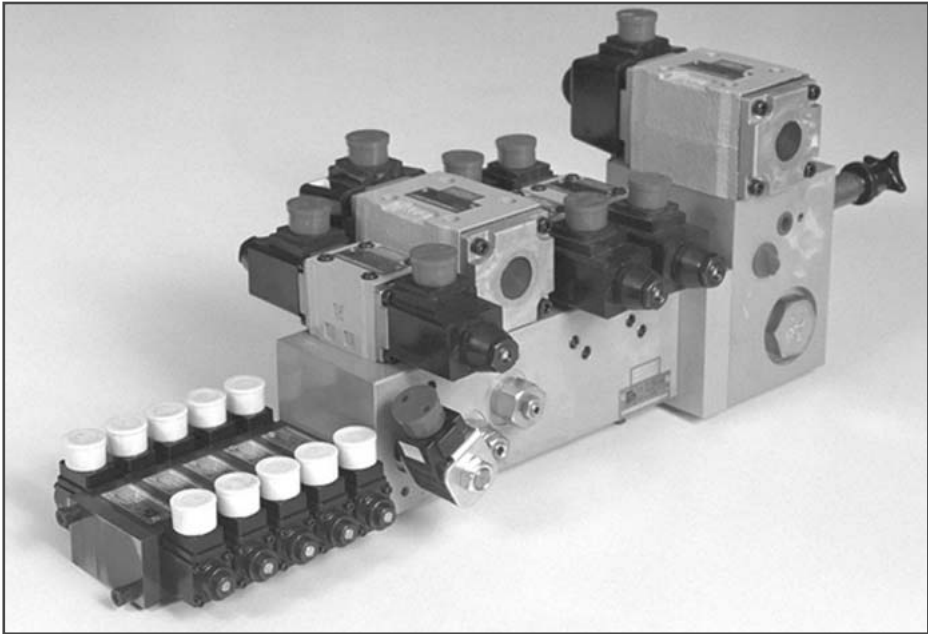


Micro **VALVES HYDRAULIQUES**
Micro **HYDRAULIC VALVES**
Mikro **HYDRAULISCHE VENTILE**



| | |
|-------------|--|
| HDE | Distributeurs Directional valves Wegeventile |
| HDNH | Distributeurs avec clapet piloté intégré Directional valves with piloted check valve Wegeventile mit entsperrbaren Rückschlagventilen |
| HSP | Limiteurs de pression Relief valves Druckbegrenzungsventile |
| HRP | Réducteurs de pression Pressure reducing valves Druckregelventile |
| HNH | Clapets antiretour pilotés banjo Piloted check valves banjo fitting Entsperrbare Rückschlagventile banjo |

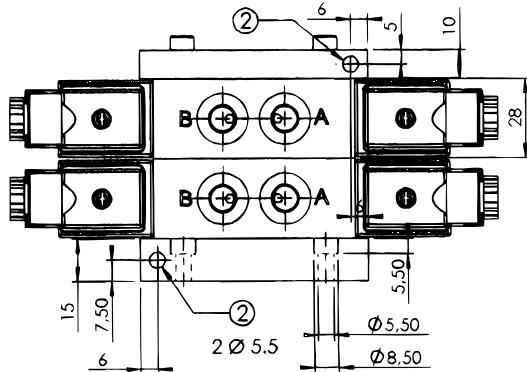
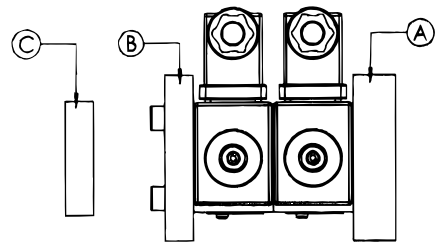
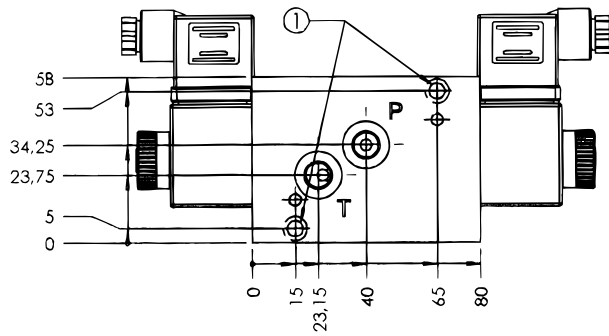
| | |
|-------|---|
| Micro | APPLICATIONS DES MICRODISTRIBUTEURS |
| Micro | APPLICATIONS OF MICRO DIRECTIONAL VALVES |
| Mikro | ANWENDUNGSBEISPIELE MIT MIKROWEGESCHIEBERVENTILEN |



Montage des blocs micros

Micro blocs assembly

Montage von Mikroblöcken



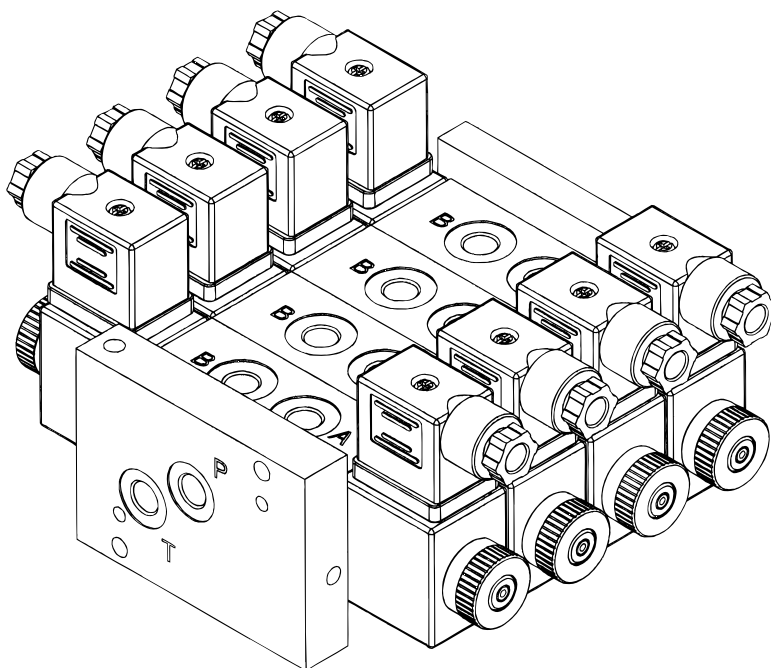
| | |
|----------------|-------------------|
| Orifice PTAB | G1/8" cylidrique |
| Ports PTAB | G1/8" cylindrical |
| Anschluss PTAB | G1/8" zylindrisch |

| Repère Mark Zeichen | Libellé Item Inhalt | Code |
|---------------------------|--|---------|
| A | Plaque de raccordement Connector plate Anschlussplatte | 1156300 |
| B | Plaque de fermeture End plate Abschlussplatte | 1490100 |
| C | Plaque de fermeture économique Economy end plate Sparsame Abschlussplatte | 1242500 |
| 1 | 2 trous pour fixation verticale 2 holes for vertical mounting 2 Löcher für vertikale Befestigung | |
| 2 | 2 trous pour fixation horizontale 2 holes for horizontal mounting 2 Löcher für horizontale Befestigung | |

Vis d'assemblage

Assembly bolts

Zusammenstellungsschrauben



| Vis d'assemblage Assembly bolts Zusammenstellungsschrauben | |
|--|---------|
| Nombre de modules Number of valves Modulanzahl | Code |
| 1 | 1490400 |
| 2 | 1490700 |
| 3 | 1490800 |
| 4 | 1490900 |
| 5 | 1491000 |
| 6 | 1278300 |
| 7 | 1278200 |
| Couple de serrage Torque wrench setting Anzugsdrehmoment | |
| 7.0 Nm | |

| | |
|--------------------------------|---|
| Version Model Ausführung | Référence Part number Bestellnummer |
|--------------------------------|---|

| | | | | | | | |
|-------------------------------------|-----|-----|----|---|----|---|---|
| Flasquable - Stackable - Flanschbar | HDE | 3DF | ** | a | ** | N | b |
| En ligne - In line - Rohranschluss | HDE | 3DL | ** | a | ** | N | b |

| | |
|--|--|
| 4/3 centrage ressort □ 4/3 spring centering □ 4/3 Federzentrierung | 4/2 retour ressort □ 4/2 spring return □ 4/2 Federrückstellung |
| | |
| 1A | 4A |
| 1B | 4B |
| 1C | 4C |
| 1E | 4E |
| 1F | 4F |
| 1G | 4G |
| 1H | 4H |
| 1J | 4J |
| | 3A |

| | | |
|---|----|----|
| Tension d'alimentation Supply voltage Versorgungsspannung | | |
| 48V 50Hz | cr | A4 |
| 110V 50Hz/115V 60Hz | cr | A5 |
| 220V 50Hz/230V 60Hz | cr | A6 |
| 12V CC/DC = | | C1 |
| 24V CC/DC = | | C2 |

cr : muni de connecteur-redresseur
cr : connector with rectifier
cr : Anschluss mit Gleichrichter

| | |
|---|---|
| a | Matière joint Seal materials Dichtungswerkstoffe |
| H | Nitrile (standard) |
| V | Viton |

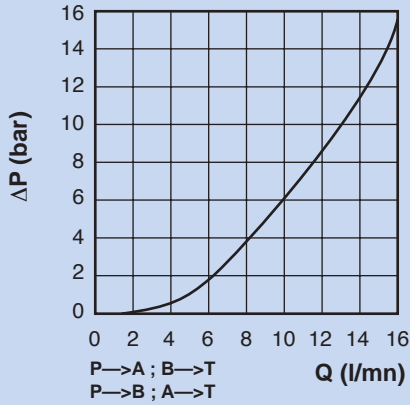
| | |
|----------------------------|--------|
| HDE 3DF... | |
| | |
| HDE 3DL... | |
| | |
| Poids Weight Gewicht | 0,8 kg |
| | 0,7 kg |

| | |
|---|--|
| b | Connecteur électrique Electrical connector Elektroanschluss |
| | Connecteur standard Standard connector Standardanschluss |
| 0 | Sans Without Ohne |

sur demande
on request
auf Anfrage

Caractéristiques Performance Kennlinien

Perte de charge
Viscosité 30 cst

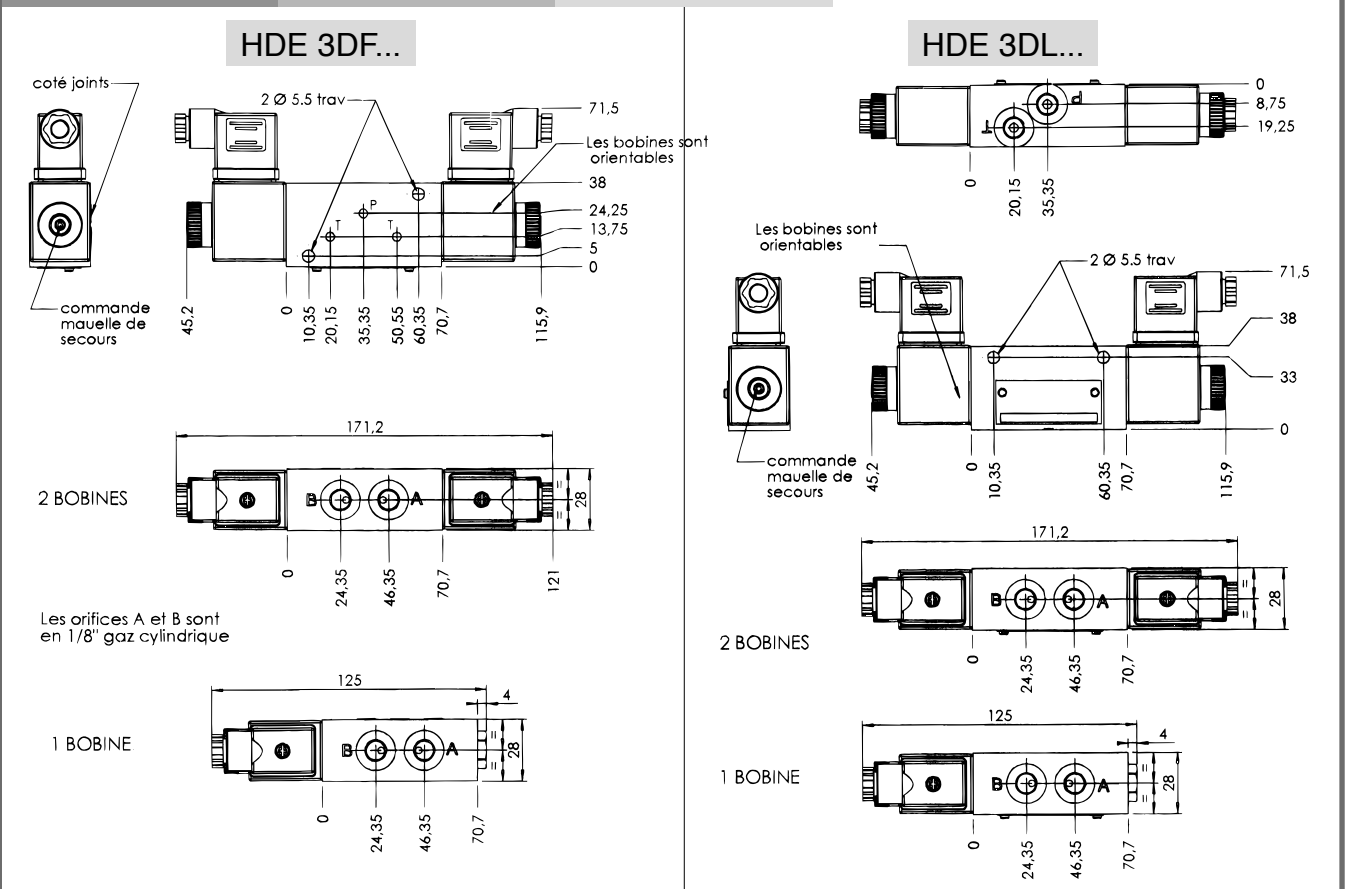


| | |
|--|-------------------------|
| Orifice/Port/Anschluss | 1/8" Gaz Cylindrique |
| Passage/Diametre/Durchmesser | 3 mm |
| P max | 200 bar |
| Q max | 10 l/m |
| Puissance/Power/Leistung | 25 W |
| Fuite/Leakage/Leckage | 15 ml/mn |
| Δp ligne-P par distributeur (10 l/mn) P-line Δp per directional valve Δp in P-Kanal pro Ventil (10 l/mn) | 0.4 bar 30 cSt |

Pièces de rechange Spare parts Ersatzteile

| Pochette pour 5 valves/Kit for 5 valves/Satz für 5 Ventile : | Nbr | Code |
|--|-----|---------|
| - Joints plan de pose/Interface seals/Dichtungssatz für Lochbild | 15 | 3166900 |
| - Ressorts/Springs/Federn | 10 | |
| - Joints de l'électro-aimant/Solenoid seals/Dichtungen für Electromagnete | 10 | |
| Joints plan de pose/Interface seals/Dichtungssatz für Lochbild (10 valves) | 30 | 1498400 |

Encombrement Overall dimensions Abmessung



HDNH

DISTRIBUTEURS AVEC CLAPET A/R PILOTE INTEGRE

DIRECTIONAL VALVES WITH PILOTED CHECK VALVE

WEGESCHIEBERVENTILE MIT ENTPERRBAREM RÜCKSCHLAGVENTIL

Micro
Micro
NG 3

| | |
|--------------------------------|---|
| Version Model Ausführung | Référence Part number Bestellnummer |
|--------------------------------|---|

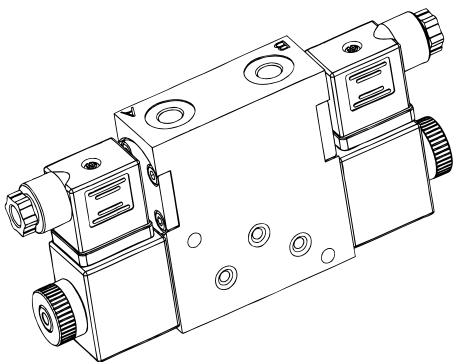
| | | | | | | | |
|-------------------------------------|------|-----|----|---|----|---|---|
| Flasquable - Stackable - Flanschbar | HDNH | 3DF | ** | a | ** | N | b |
| En ligne - In line - Rohranschluss | HDNH | 3DL | ** | a | ** | N | b |

| | |
|--|--|
| 4/3 centrage ressort □ 4/3 spring centering □ 4/3 Federzentrierung □ | 4/2 retour ressort □ 4/2 spring return □ 4/2 Federrückstellung □ |
| | |
| 1A | 4A |
| 1B | 4B |
| 1C | 4C |
| 1E | 4E |
| 1F | 4F |
| 1G | 4G |
| 1H | 4H |
| 1J | 4J |
| | 3A |

| | | |
|---|----|----|
| Tension d'alimentation Supply voltage Versorgungsspannung | | |
| 48V 50Hz | cr | A4 |
| 110V 50Hz/115V 60Hz | cr | A5 |
| 220V 50Hz/230V 60Hz | cr | A6 |
| 12V CC/DC = | | C1 |
| 24V CC/DC = | | C2 |

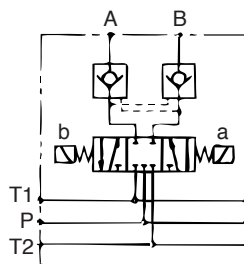
cr : muni de connecteur-redresseur
cr : connector with rectifier
cr : Anschluss mit Gleichrichter

HDNH 3DF...

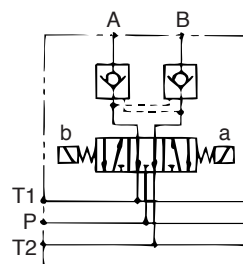


Poids
Weight
Gewicht

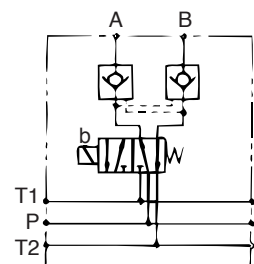
1.3 kg



HDNH 2DF1A



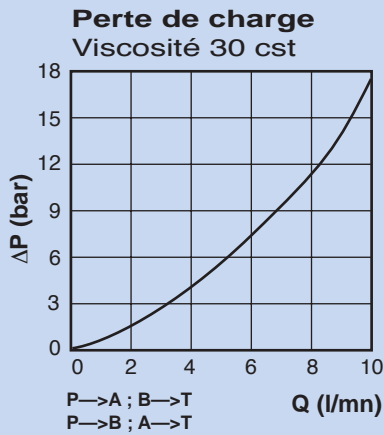
HDNH 2DF1C



HDNH 2DF3A

| | | | |
|----------|---|----------|--|
| a | Matière joint Seal materials Dichtungswerkstoffe | b | Connecteur électrique Electrical connector Elektroanschluss |
| H | Nitrile (standard) | | Connecteur standard Standard connector Standardanschluss |
| V | Viton | 0 | Sans Without Ohne |

Caractéristiques Performance Kennlinien

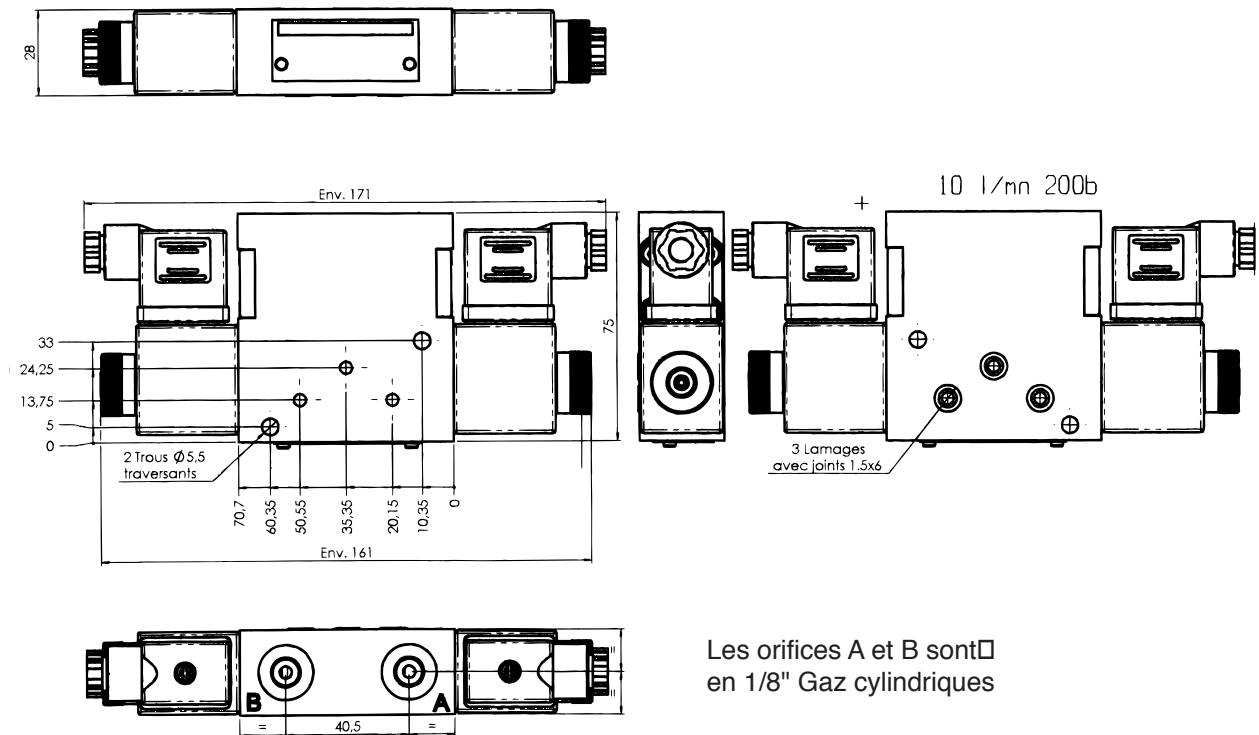


| | |
|--|-------------------------|
| Orifice/Port/Anschluss | 1/8" Gaz Cylindrique |
| Passage/Diametre/Durchmesser | 3 mm |
| P max | 200 bar |
| Q max | 10 l/m |
| Puissance/Power/Leistung | 25 W |
| Fuite/Leakage/Leckage | 15 ml/mn |
| Δp ligne-P par distributeur (10 l/mn) P-line Δp per directional valve Δp in P-Kanal pro Ventil (10 l/mn) | 0.4 bar 30 cSt |

Pièces de rechange Spare parts Ersatzteile

| Pochette pour 5 valves/Kit for 5 valves/Satz für 5 Ventile : | Nbr | Code |
|--|-----|---------|
| - Joints plan de pose/Interface seals/Dichtungssatz für Lochbild | 15 | 3166900 |
| - Ressorts/Springs/Federn | 10 | |
| - Joints de l'électro-aimant/Solenoid seals/Dichtungen für Electromagnete | 10 | |
| Joints plan de pose/Interface seals/Dichtungssatz für Lochbild (10 valves) | 30 | 1498400 |

Encombrement Overall dimensions Abmessung

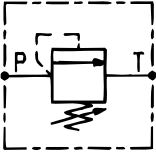


HSP

ISO
4401

LIMITEURS DE PRESSION RELIEF VALVES DRUCKBEGRENZUNGSVENTILE

Micro
Micro
NG 3



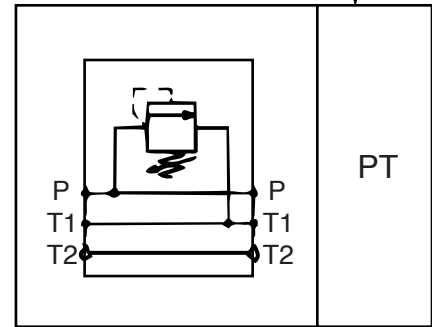
| | | | |
|-------------------------------|--|----------------|---|
| Montage Mounting Einbau | Plage de pression Pressurerange Druckbereich | P max Q max | Référence Part number Bestellnummer |
|-------------------------------|--|----------------|---|

| | | | | | | | | |
|--|-------------|--------------------|-----|-----|----|---|----|---|
| Flasquable Stackable Zwischenplatten | 5 - 200 bar | 200 bar 10 l/mn | HSP | 3DF | 20 | a | PT | b |
|--|-------------|--------------------|-----|-----|----|---|----|---|

| | |
|----------|---|
| a | Matière joint Seal materials Dichtungswerkstoffe |
| H | Nitrile (standard) |
| V | Viton |

■ sur demande
on request
auf Anfrage

| | |
|----------|---|
| b | Réglage Adjustment Einstellung |
| Z | Vis Screw Schraube |



| | |
|----------------------------|--------|
| HSP 3DF... | |
| | |
| Poids Weight Gewicht | 0.5 kg |

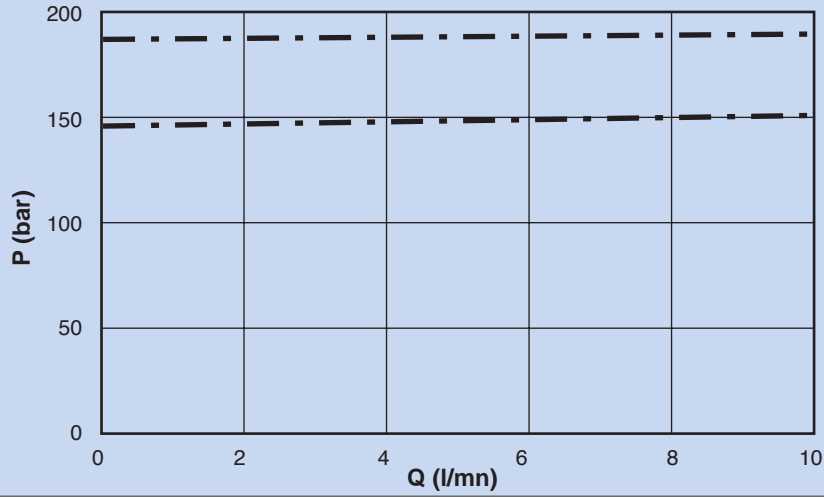
Caractéristiques

Performance

Kennlinien

Courbes débit-pression

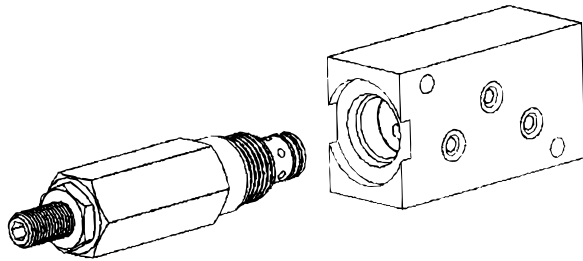
Viscosité 30 cst



Pièces de rechange

Spare parts

Ersatzteile

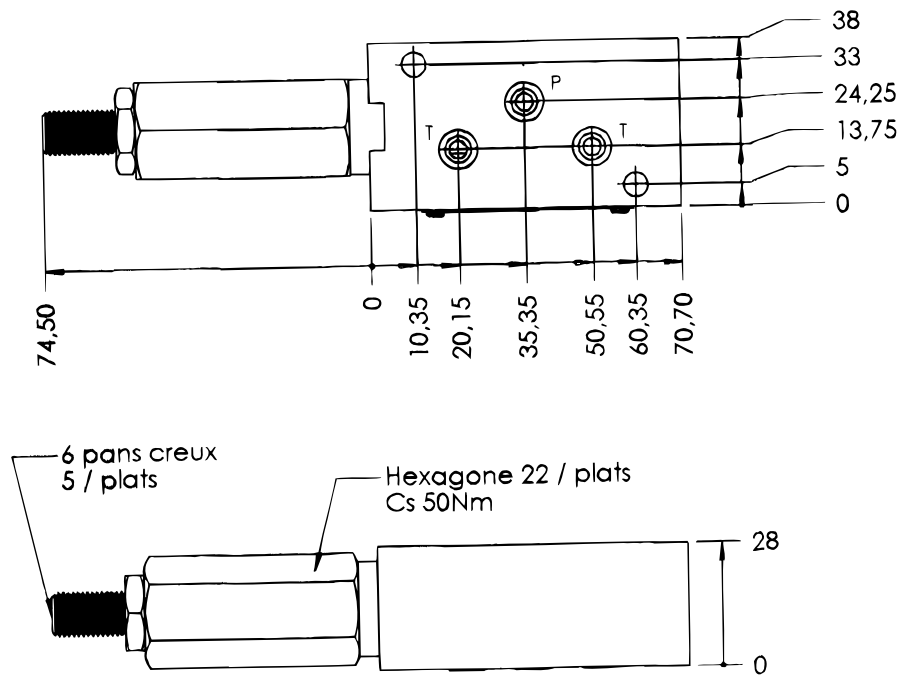


| | Code |
|---|----------|
| Pochette de joints (10 cartouches) Seal kit (10 cartridges) Dichtungssatz (10 Patronen) | SK30500N |
| Joints plan de pose (30 o-rings) Interface seal kit (30 o-rings) Lochbild (30 o-rings) | 1498400 |
| Cartouches Cartridges Patronen | A02B2HZN |

Encombrement

Overall dimensions

Abmessung



HRP

REDUCTEURS DE PRESSION PRESSURE REDUCING VALVES DRUCKREGELVENTILE

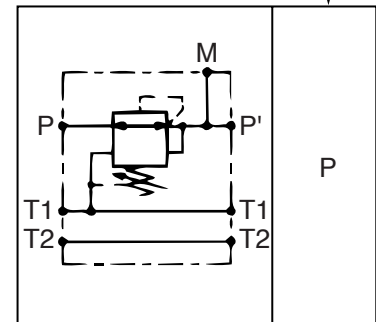
Micro
Micro
Mikro

| | | | |
|-------------------------------|--|------------------------|---|
| Montage Mounting Einbau | Plage de pression Pressurerange Druckbereich | P_{max} Q_{max} | Référence Part number Bestellnummer |
|-------------------------------|--|------------------------|---|

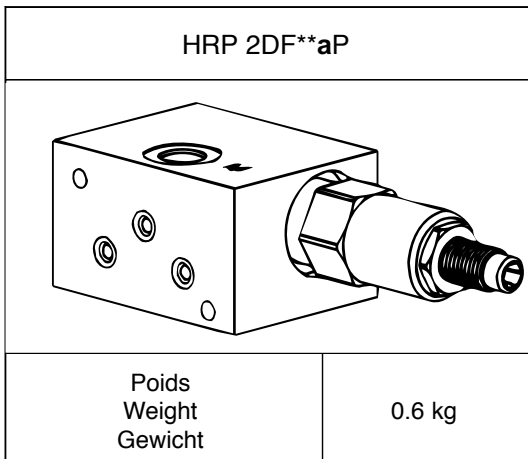
| | | | | | | | |
|--|--------------|--------------------|-----|-----|----|---|---|
| Flasquable Stackable Zwischenplatten | 5 - 20 bar | 200 bar 12 l/mn | HRP | 2DF | 02 | a | P |
| | 7 - 40 bar | | HRP | 2DF | 04 | a | P |
| | 22 - 80 bar | | HRP | 2DF | 08 | a | P |
| | 35 - 150 bar | | HRP | 2DF | 15 | a | P |

| | |
|---|---|
| a | Matière joint Seal materials Dichtungswerkstoffe |
| H | Nitrile (standard) |
| V | Viton |

sur demande
on request
auf Anfrage

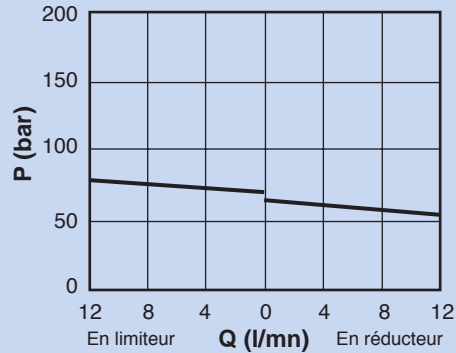


| | |
|---------------------------|---|
| Modèle Model Modell | Avec limiteur de pression $P' \rightarrow T$ Incorporating a pressure relief valve $P' \rightarrow T$ Mit Druckbegrenzungsventil $P' \rightarrow T$ |
|---------------------------|---|



Courbes de régulation P = f(Q)

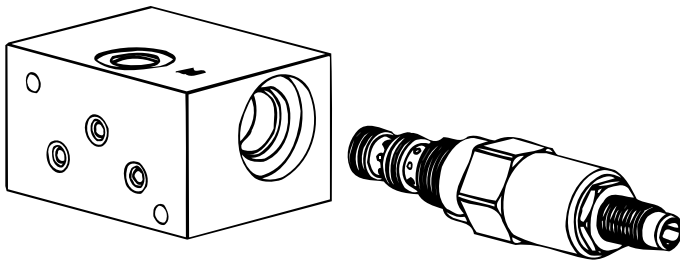
Viscosité 32 cst



Pièces de rechange

Spare parts

Ersatzteile

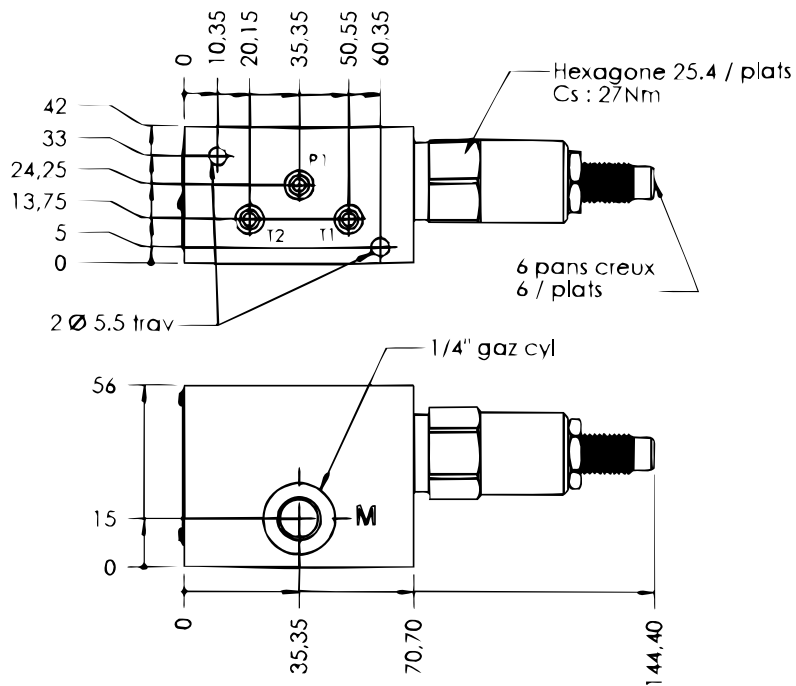


| | | Code |
|---|----|-----------------|
| Pochette de joints (10 cartouches) Seal kit (10 cartridges) Dichtungssatz (10 Patronen) | | SK3-3N-BM |
| Joints plan de pose (30 o-rings) Interface seal kit (30 o-rings) Lochbild (30 o-rings) | | 1498400 |
| Cartouches | 02 | PR08-32A-O-N-3 |
| Cartridges | 04 | PR08-32A-O-N-6 |
| Patronen | 08 | PR08-32A-O-N-12 |
| | 15 | PR08-32A-O-N-22 |

Encombrement

Overall dimensions

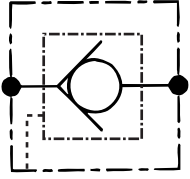
Abmessung



HNH

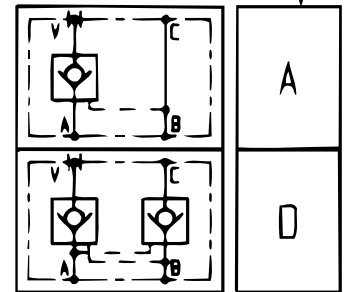
CLAPETS ANTI-RETOUR PILOTES PILOTED CHECK VALVES ENTSPERRBARE RÜCKSCHLAGVENTILE

Micro
Micro
Mikro



| | | | |
|-------------------------------|--|----------------|---|
| Montage Mounting Einbau | Rapport : <u>pression retenue</u> pression pilote Ratio : <u>restrain pressure</u> pilot pressure Verhältnis : <u>Haltdruck</u> Steuerdruck | P max Q max | Référence Part number Bestellnummer |
|-------------------------------|--|----------------|---|

| | | | | | | | |
|---|-------|---|---------|-----|-----|---|---|
| En ligne (banjo) In line (banjo) Rohranschluss(banjo) | 4 : 1 | Action directe Direct action Direkte Aktion | 200 bar | HNH | 2DL | a | * |
|---|-------|---|---------|-----|-----|---|---|

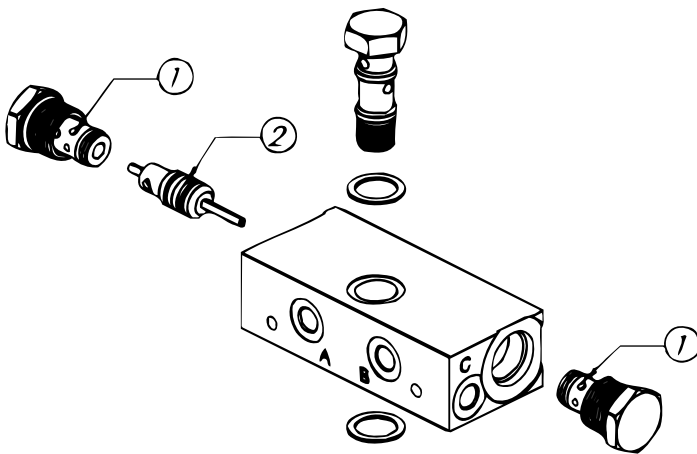
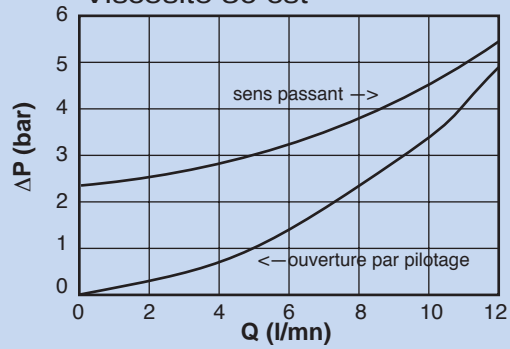


| | |
|---|---|
| a | Matière joint Seal materials Dichtungswerkstoffe |
| H | Nitrile (standard) |
| V | Viton |

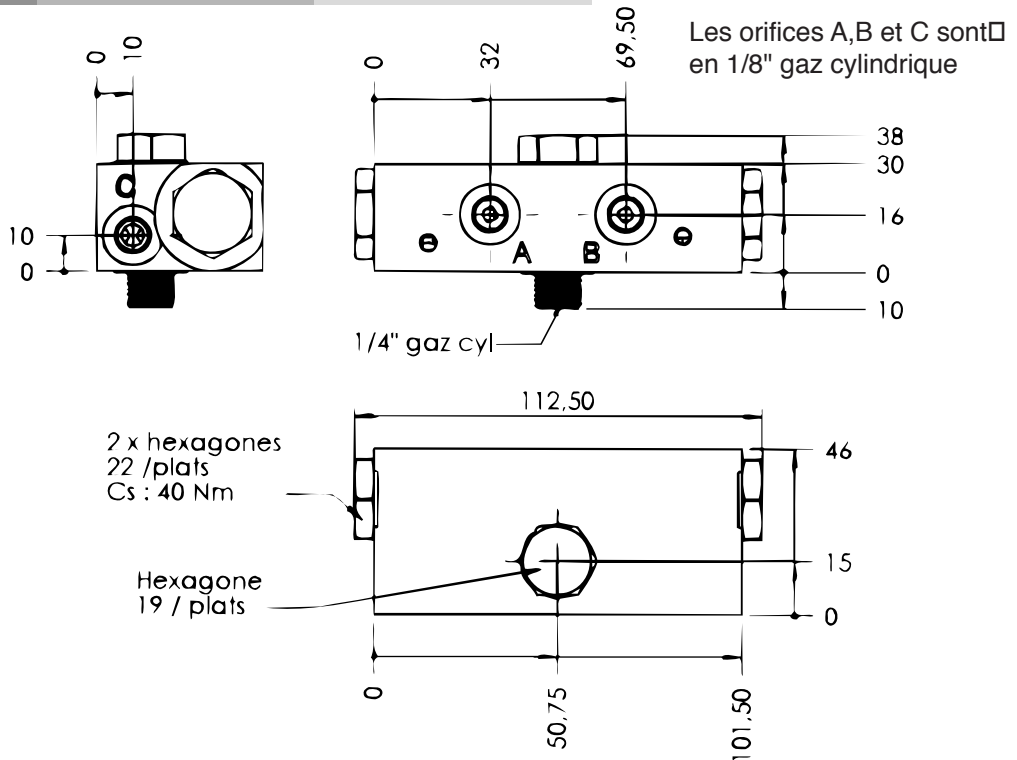
■ sur demande
on request
auf Anfrage

| | |
|----------------------------|--------|
| HNH 2DL... | |
| | |
| Poids Weight Gewicht | 0.5 kg |

Perte de charge
Viscosité 30 cst



| Repère Mark TRAD | Cartouche Cartridge Patronen | Pochette joints Seal kit Dichtungssatz |
|------------------------|------------------------------------|--|
| 1 | D02B2-2.1N | SK30515N |
| 2 | PP12025 | |



| | |
|-------|---|
| Micro | APPLICATIONS DES MICRODISTRIBUTEURS |
| Micro | APPLICATIONS OF MICRO DIRECTIONAL VALVES |
| Mikro | ANWENDUNGSBEISPIELE MIT MIKROWEGESCHIEBERVENTILEN |

